

# **KEEPING SECRETS!**

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#### **BLETCHLEY PARK TRUST**

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> www.bletchleypark.org.uk, Twitter: @BletchleyPark

Do you have any secrets? What kind of people might need to keep secrets?

## HERE'S ONE WAY OF KEEPING A SECRET:

**ABCDEFGHIJKLMNOPQRSTUVWXYZ** Secret alphabet

XYZABCDEFGHIJKLMNOPQRSTUVW Real alphabet

For example: The table above shows you how to swap the letters in your message for different letters so

... but it's easy to change it back again when you need to. You just need to know a simple piece of information called a "key". Look at the bottom row of the table: it's just the alphabet, but each letter has been shifted up 3 places, so we could say that the key is "+3". Can you draw tables for the keys "+5" and "-2"?

that it's not so easy for someone else to read...

## GOOD SECRETS

When is it a good idea to keep secrets? What kind of secrets should you keep?

# BAD SECRETS

When shouldn't you keep secrets? What kind of secret is a bad one?

If I write "i can keep a secret!" the table tells me to change it to "L FDQ NHHS D VHFUHW!"

What does this say, then?

VR BRX WKLQN BRX'UH D FRGHEUHDNHU?

Can you write your own message secretly?

Can you work out which key was used to hide this message?

IYE'BO QODDSXQ ZBODDI QYYN KD DRSC! GRKD MVEOC NSN IYE PSXT? RYG MYEVN IYE RSNO DROW?

## HINT: Look at the words with double-letters in them. How might they help?

## Things to THINK about

How many different "+" keys are there?

What would the key "x 3, +2" look like? (Hint: label each letter with the numbers 0 - 25 before you draw your table)

Can you think of a different way to jumble the alphabet? Remember, you need to be able to unjumble it again!

## Things to DO

- Create a Caesar wheel or a paper Enigma
- >>> Collect examples of different codes in everyday use
- Visit Bletchley Park!

HINT: If you're unsure about some of the terms in this challenge, you can look them up on the Internet!!

## Things to FIND OUT

- >> What's so important about the Enigma machine?
- What's the earliest example of secret writing?

Some types of secret writing are "codes", "ciphers", and "steganography":

- What's the difference?
- Where are they used today?

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